AMENDMENT TO THE SPECIFICATION

In the amended specification filed March 29, 2007, please amend the paragraph as follows:

There are three indices for measuring body water content: total body water (TBW), intracellular water (ICW) and extracellular water (ECW). TBW equals the sum of ICW and ECW, and these three indices are significant to assess the physical attributes and the balance status of intracellular and extracellular liquid. There are also corresponding methods for measuring body water. The method often used is drug dilution method. For example, to take certain doses of antibilin or D_2O, after these medical substances disperse uniformly to global body, to extract some sample of blood and urine for testing. Also there is a method called multiple-factor isotope dilution, which can measure multiple body contents including water content from microcosmic aspect. None of these methods presented above can meet the demand of fast and integrated monitoring of body weight, fat and water content. Especially some methods of medical substance dilution, can only be done in hospitals, have long time period, cost much and can not be done as often as needed.

The method of bioelectrical impedance analysis (BIA) is considered to be the simplest method for measuring human body composition (such as fat content). This method is based upon the principle that body tissue conductivity of bio electricity in different areas of the body stimulated by outside electricity is different. For example, the conductivity of muscle is high and then the impedance is small because of its high rate of water content, while the conductivity of fat tissue, bone tissue and lung tissue filled with air is very low and the impedance is relatively great. So body composition can be estimated according to tissue's impedance. Up to now, though those open patents on measuring body composition based on bioelectrical impedance analysis (BIA) adopt different circuits, arithmetic, apparatus structures and different output methods, they have three common characteristic in nature. The first is to obtain bioelectric impedance by measuring voltage or voltage difference then transforming to digital value through A/D, the second is to use at least more than three electrodes (groups), among which two electrodes is certain to apply high frequency small current to human body in order to stimulate bio electricity and the other two electrodes collect stimulated voltage signal indicating bioelectrical impedance,

if unite two of four electrodes to be used as reference electrodes, then there are 3 electrodes, the third is that the different frequency signals applied to human body must be signals with determined frequencies. As disclosed in U.S. Pat. No. 6, 151, 523, bioelectrical impedance can be measured by placing electrodes at a person's toes and heels, and by inputting the weight and height of the subject, percent body fat can also be estimated. ~~The shortcomings of this patent are that the structure of the electromagnetic probe is coaxial and complicated.~~ The shortcomings of the above methods are: first, the methods have limitation if body fat and water content are determined based on bioelectrical impedance alone, second, because of the great diversity of human bodies, if only one or multiple determined frequencies are applied to human body, the results can not indicate body status accurately, and third, there are large errors in such low-cost apparatus when using voltage measurement to determine body impedance.

Please change the Abstract paragraph as follows:

A method for measuring dielectric constant of body endermic tissues and body impedance based on the method of frequency digital sampling and for evaluating body composition is provided;. The method is through inputting ~~through~~ the I/O interface of a microprocessor the measured body weight frequency signals, oscillating frequency signals related to dielectric constant of body endermic tissues and body impedance signals corresponding to non-fixed different frequencies, and calculating through the software of the microprocessor the body fat content, total body water, ratio between intracellular water and total body water, ~~and displaying the~~ The body weight, body fat ~~content ,total~~content, total body water and ratio between intracellular water and total body water are displayed on the display. A body composition monitor based on the above method, which ~~includes a~~includes a weighing sensor, a weighing signal processing circuit, and a display unit.